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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,444	07/09/2003	Harichandra Reddy Sannapa Reddy	5681-54400	9140

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EXAMINER	
WAI, ERIC CHARLES	
ART UNIT	**PAPER NUMBER**
2195	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/616,444	SANNAPA REDDY ET AL.	
	Examiner	Art Unit	
	Eric C. Wai	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/20/05, 7/3/06, 1/5/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-51 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 26-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 26-50 are rejected under 35 U.S.C. 101 because the claimed invention, appearing to be comprised of software alone without claiming associated computer hardware required for execution, is not supported by either a specific and substantial asserted utility.

5. Claim 51 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is defined as transmission media or signals. In that event, the claims are directed to a form of energy which at present the office feels does not fall into a category of invention. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf>

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Kalyanavarathan et al. (US Pat No. 7,185,096 hereinafter Kalyanavarathan).

8. Kalyanavarathan was disclosed on IDS dated 04/20/05.

9. Regarding claim 1, Kalyanavarathan teaches a method, comprising:

a load balancer receiving a request (Fig 2 step 200);

the load balancer selecting a node to handle the request from among a plurality of nodes associated with the load balancer and not known by the load balancer to be inactive (Fig 2 step 202);

the load balancer determining if the selected node is able to service the request (Fig 2 step 210);

if the selected node is determined to be unable to service the request, the load balancer selecting another node to handle the request from among the plurality of nodes associated with the load balancer and not known by the load balancer to be inactive (Fig 2 steps 212 and 214).

10. Regarding claim 2, Kalyanavarathan teaches the load balancer is one load balancer among a plurality of load balancers in a load balancer hierarchy (col 1 lines 37-39).

11. Regarding claim 3, Kalyanavarathan teaches the plurality of nodes associated with the load balancer are load balancers in a lower-level of the load balancer hierarchy (col 1 lines 37-39, wherein it is inherent that the individual nodes that receive the workloads are in a lower level).

12. Regarding claim 4, Kalyanavarathan teaches the load balancer is associated with a higher-level load balancer in the load balancer hierarchy, and wherein said receiving a request comprises receiving the request from the higher-level load balancer (col 1 lines 37-39, wherein it is inherent that in a hierarchy of load balancers, the request would pass thru higher levels first).

13. Regarding claim 5, Kalyanavarathan teaches that if the selected node is determined to be unable to service the request and if no other nodes from among the

plurality of nodes associated with the load balancer are not known by the load balancer to be inactive, the load balancer sending a message to the higher-level load balancer to disable the load balancer from receiving further requests (col 5 lines 56-57 and 60-62).

14. Regarding claim 6, Kalyanavarathan teaches that receiving said message, the higher-level load balancer marking the load balancer as inactive (col 6 lines 8-16).

15. Regarding claim 7, Kalyanavarathan teaches that upon receiving said message, the higher-level load balancer re-load-balancing requests pending with the load balancer among other load balancers associated with the higher-level load balancer (col 5 lines 63-67).

16. Regarding claim 8, Kalyanavarathan teaches determining if the selected node is able to service the request comprises the load balancer actively probing the plurality of nodes associated with the load balancer (col 4 lines 11-14).

17. Regarding claim 9, Kalyanavarathan teaches the load balancer periodically performing said actively probing (col 4 lines 11-14).

18. Regarding claim 10, Kalyanavarathan teaches if one of the plurality of nodes associated with the load balancer does not respond to said active probing within a timeout period, the load balancer marking that node as inactive (col 4 lines 15-20).

19. Regarding claim 11, Kalyanavarathan teaches the load balancer marking that node as inactive comprises re-load-balancing requests pending with that node among the plurality of nodes associated with the load balancer and not known by the load balancer to be inactive (col 4 lines 31-34).

20. Regarding claim 12, Kalyanavarathan teaches that the load balancer marking that node as inactive comprises, if no other nodes from among the plurality of nodes associated with the load balancer are not known by the load balancer to be inactive, the load balancer sending a message to the higher-level load balancer to disable the load balancer from receiving further requests (col 6 lines 8-16).

21. Regarding claim 13, Kalyanavarathan teaches the load balancer sending the request to the selected node; wherein said determining if the selected node is able to service the request comprises the load balancer determining if the selected node fails to respond to the request within a timeout period (col 4 lines 15-20).

22. Regarding claim 14, Kalyanavarathan teaches that if the selected node fails to respond to the request within the timeout period, the load balancer marking the selected node as inactive (col 4 lines 18-20).

23. Regarding claim 15, Kalyanavarathan teaches the load balancer marking the selected node as inactive comprises, if no other nodes from among the plurality of nodes associated with the load balancer are not known by the load balancer to be inactive, the load balancer sending a message to the higher-level load balancer to disable the load balancer from receiving further requests (col 6 lines 8-16).

24. Regarding claim 16, Kalyanavarathan teaches the load balancer marking the selected node as inactive comprises re-load-balancing requests pending with the selected node among the plurality of nodes associated with the load balancer and not known by the load balancer to be inactive (col 4 lines 31-34).

25. Regarding claim 17, Kalyanavarathan teaches after said selecting the node, the load balancer sending a dummy request to the selected node; wherein said determining if the selected node is able to service the request comprises the load balancer determining if the selected node fails to respond to the dummy request within a timeout period (col 4 lines 15-22).

26. Regarding claim 18, Kalyanavarathan teaches that if the selected node fails to respond to the dummy request within the timeout period, the load balancer marking the selected node as inactive (col 4 lines 17-20).

27. Regarding claim 19, Kalyanavarathan teaches the load balancer marking the selected node as inactive comprises, if no other nodes from among the plurality of nodes associated with the load balancer are not known by the load balancer to be inactive, the load balancer sending a message to the higher-level load balancer to disable the load balancer from receiving further requests (col 6 lines 8-16).

28. Regarding claim 20, Kalyanavarathan teaches the load balancer marking the selected node as inactive comprises re-load-balancing requests pending with the selected node among the plurality of nodes associated with the load balancer and not known by the load balancer to be inactive (col 4 lines 31-34).

29. Regarding claim 21, Kalyanavarathan teaches that if the selected node responds to the dummy request within the timeout period, the load balancer sending the request to the selected node (col 4 lines 23-25).

30. Regarding claim 22, Kalyanavarathan teaches wherein said determining if the selected node is able to service the request further comprises the load balancer determining if the selected node fails to respond to the request within a timeout period (col 4 lines 15-20).

31. Regarding claim 23, Kalyanavarathan teaches that determining if the selected node is able to service the request comprises the load balancer receiving a message

from the selected node indicating that the selected node is disabled (col 5 lines 56-57 and 60-62).

32. Regarding claim 24, Kalyanavarathan teaches that upon receiving said message, the load balancer marking the selected node as inactive (col 6 lines 8-16).

33. Regarding claim 25, Kalyanavarathan teaches upon receiving said message, the load balancer re-load-balancing requests pending with the selected node among the plurality of nodes associated with the load balancer and not known by the load balancer to be inactive (col 6 lines 17-22).

34. Regarding claims 26-50, they are the system claims of claims 1-25 above. Therefore, they are rejected for the same reasons as claims 1-25 above.

35. Regarding claim 51, it is the computer access medium claim of claim 1 above. Therefore, it is rejected for the same reasons as claim 1 above.

Conclusion

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric C. Wai whose telephone number is 571-270-1012. The examiner can normally be reached on Mon-Thurs, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng - Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EW

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